

2. (Amended) The method of claim 1, wherein the nucleic acid encoding the cyclin-dependent kinase inhibitor is homologous to ICK1.

a! 3. (Amended) The method of claim 1, wherein the nucleic acid encoding the cyclin-dependent kinase inhibitor is ICK1.

4. (Amended) The method of claim 1, wherein the cyclin-dependent kinase inhibitor polypeptide is at least 70% identical, when optimally aligned, to ICK1.

5. (Amended) The method of claim 1, wherein the cyclin-dependent kinase inhibitor polypeptide is ICK1.

6. (Reiterated) The method of claim 1, wherein the plant is a member of the Cruciferae family.

7. (Reiterated) The method of claim 1, wherein the plant is a member of the Brassica genus.

8. (Reiterated) The method of claim 1, wherein the nucleic acid encoding the cyclin-dependent kinase inhibitor polypeptide is operably linked to a constitutive promoter.

9. (Reiterated) The method of claim 1, wherein the nucleic acid encoding the cyclin-dependent kinase inhibitor polypeptide is operably linked to a tissue-specific promoter.

10. (Reiterated) The method of claim 9, wherein the tissue-specific promoter is at least 90% identical, when optimally aligned, to an AP3 promoter.

11. (Reiterated) The method of claim 9, wherein the tissue-specific promoter is the AP3 promoter.

12. (Reiterated) The method of claim 9, wherein the tissue-specific promoter mediates expression of the nucleic acid encoding the cyclin-dependent kinase inhibitor polypeptide in petal or stamen primordia.

13. (Reiterated) The method of claim 1 wherein the development of the tissue in the plant is modified so that the plant is male sterile.

14. (Reiterated) The method of claim 1 wherein the development of the tissue in the plant is modified so that petals on the transformed plant are altered or absent.

15. (Reiterated) A transgenic plant comprising an expressible heterologous nucleic acid encoding a cyclin-dependent kinase inhibitor polypeptide capable of inhibiting a cyclin-dependent kinase, wherein the heterologous nucleic acid is introduced into the transgenic plant, or an ancestor of the transgenic plant by the method of claim 1.

16. – 17. (Withdrawn)

18. (Reiterated) A transgenic plant having a recombinant genome comprising a heterologous nucleic acid encoding a cyclin-dependent kinase inhibitor that is expressed in a proliferative tissue of the transformed plant to inhibit development of a differentiated tissue in the plant.

19. (Withdrawn)

20. (Amended) A transgenic plant tissue obtained from the transgenic plant of
C1,2 claim 18.

21. (Reiterated) The plant tissue of claim 20 wherein the tissue is selected from the group consisting of a seed and a flower.

22. (Reiterated) A method of growing the transgenic plant of claim 18, comprising growing the plant under conditions so that the cyclin-dependent kinase inhibitor polypeptide is expressed in a proliferative tissue of the transformed plant to inhibit development of a differentiated tissue in the plant.

23. – 26. (Withdrawn)

27. (Reiterated) A method of modifying development of a plant comprising transforming a plant cell with a nucleic acid encoding a plant cyclin-dependent kinase inhibitor polypeptide to produce a transformed plant cell; and, growing the transformed plant cell or progeny of the transformed plant cell to produce a transformed plant under conditions wherein the plant cyclin-dependent kinase inhibitor polypeptide is expressed in a proliferative tissue of the transformed plant to change the ploidy of a differentiated tissue in the plant.

REMARKS

Claims 1-27 are pending. Claims 16, 17, 19, and 23-26 stand withdrawn from consideration as a non-elected invention under a Restriction Requirement. By the present amendment, claims 2-5 and 20 are amended as suggested by the Examiner.

Claim Objections

In accordance with the Examiner's request, claims 2-5 have been amended to remove references to non-elected sequences ICK2, ICN2, ICN6, and ICN7. Withdrawal of the objection is therefore requested.

Claim Rejections under 35 U.S.C. § 112

Claims 1-15, 18, 20-22, and 27 stand rejected under 35 U.S.C. § 112, first paragraph, for allegedly not being enabled by the specification. In support of the rejection, the Examiner cites the Written Description Guidelines, and asserts that the specification describes a single nucleic acid encoding a plant-cyclin dependent kinase inhibitor polypeptide.